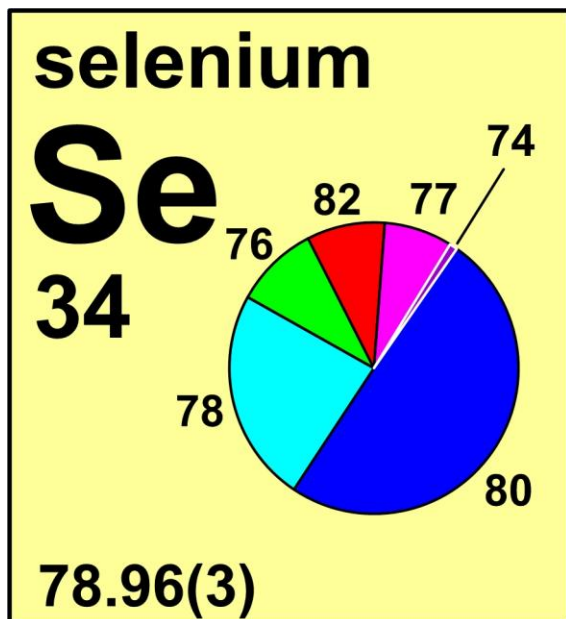





selenium

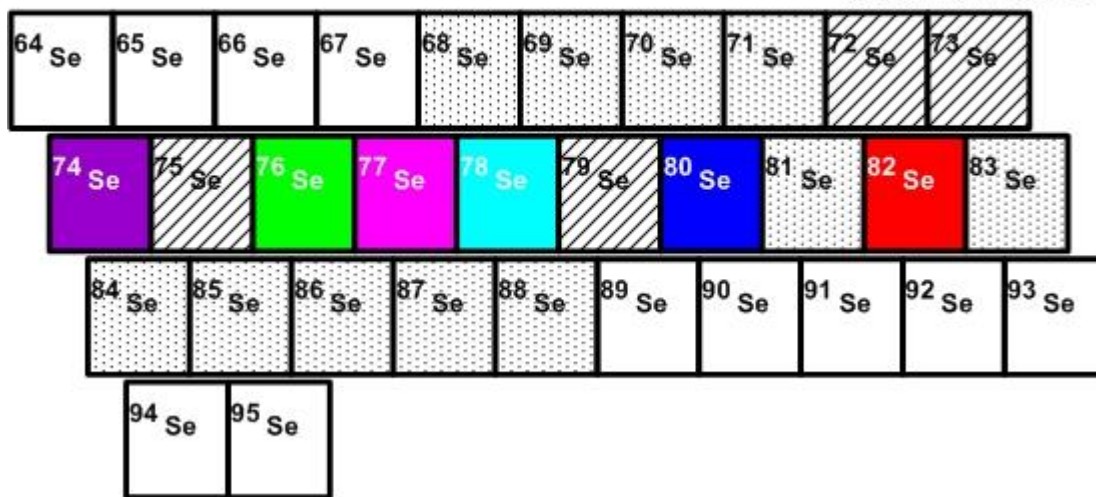


Stable isotope	Atomic mass*	Mole fraction
⁷⁴ Se	73.922 4764	0.0089
⁷⁶ Se	75.919 2136	0.0937
⁷⁷ Se	76.919 914	0.0763
⁷⁸ Se	77.917 3091	0.2377
⁸⁰ Se	79.916 5213	0.4961
⁸² Se	81.916 6994	0.0873

* Atomic mass given in unified atomic mass units, u.

Half-life of radioactive isotope

Less than 1 second 
Between 1 second and 1 hour 
Greater than 1 hour 



Important applications of stable and/or radioactive isotopes

Isotopes in industry

- 1) ⁷⁵Se is used for x-ray radiography of welds.



Figure 1: PARC System (Portable Apparatus for Radiation Control) has a 15 curie ^{75}Se source and a controlled area as low as 2 m in Radius.

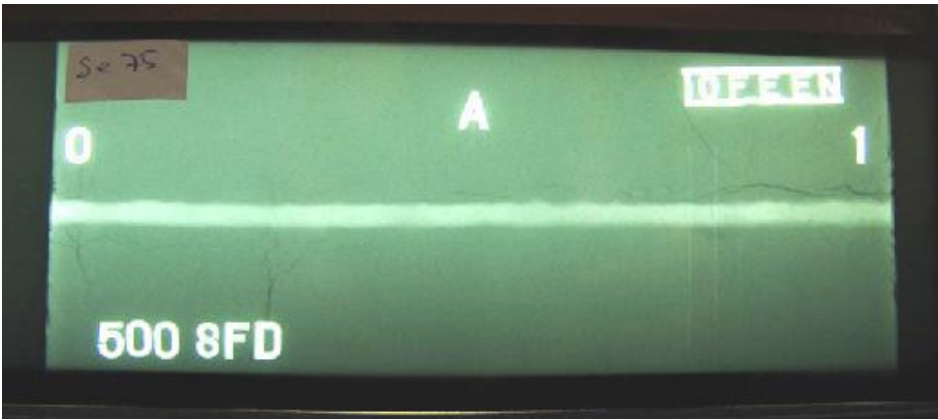


Figure 2: Film of radiographic inspection using ^{75}Se .